OCT 2 7 2003

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	U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
	<b></b>	Number - Kind Code <sup>2</sup> (if known)							

		. FOREIGN I	PATENT DOC	UMENTS		
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines. Where Relevant Passages or Relevant Figures Appear	T⁵
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
ns		WO 99 52288 A	10-14-1999	Kewazinga, LLC		
1		WO 02 096096 A	11-28-2002	Zaxel Systems, Inc.		
UL		WO 02 087218 A	10-31-2002	Kewazinga Corp.		
aL	l				7.	

Examiner Signature	1-1/14	Date Considered	6-26-05

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STAT	EMENT BY	Y APPLI	CANT	1	
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				Application Number	10/074,315
				Filing Date	February 12, 2002
7				First Named Inventor	Kanade
				Art Unit	2872
				Examiner Name	
Sheet	2	of	1	Attorney Docket Number	010130

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Cite No. 1		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published					
PC	•	Spice, Byron: "CMU experts helping CBS's 30 robotic cameras to work as one", Pittsburgh Post-Gazette, Jan. 24, 2001, Pittsburgh, PA, USA.					
PC		Grotticelli, Michael: "CBS Sports eyes Final Four", Broadcasting & Cable, no. 13, March 26, 2001, North Hollywood, CA, USA.  (www.broadcastingcable.com/index.asp?layout=print_page&articleID=CA67817)					
N		Saito, H., et al.: "Appearance-Based Virtual View Generation of Temporally-Varying Events from Multi-Camera Images in the 3D Room", 3-D Digital Imaging & Modeling, 1999 Proceedings. Second International Conference in Ottawa, Ont., Canada. October 4-8, 1999, Los Alamitos, CA, USA. IEEE COMPUT. SOC, US. October 4, 1999 pages 516-525					

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				Complete if Known			
Substitute for	form 1449A/P	ro		Application Number	10/074,315		
				Filing Date	February 12, 2002		
INFO	RMATION	DISCLO	SURE	First Named Inventor	Kanade		
STAT	EMENT B	Y APPLI	CANT	Art Unit	2872		
				Examiner Name			
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Sheet	1	of	12	Attorney Docket Number	010130		

		U.	S. PAT	TENT DO	UM	ENTS		
Examiner Cite		Document Number	Publication Date			Name of Patentee or oplicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	
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0<	<del> </del>	5,917,937	Jun 29	9, 1999	Sz	eliski et al.	ਨੰ	
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Examiner Initials*	Cite No. <sup>1</sup>	Country Code <sup>3</sup> -Number <sup>4</sup> -Kind (if known)	Code <sup>5</sup>			Applicant of Cited	Where Relevant Passages or Relevant Figures Appear	ť
10		EP 0 529 317 A1		Mar 03, 19	93	Sensormatic Electronics Corporation		
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Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document-by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



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Substitute for form 1449A/PTO	Application Number	10/074,315
	Filing Date	February 12, 2002
INFORMATION DISCLOSURE	First Named Inventor	Kanade
STATEMENT BY APPLICANT	Art Unit	2872
	Examiner Name	
(use as many sheets as necessary)	,	
Sheet 2 of 2	Attorney Docket Number	010130

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Τ²
PC		Kanade, T. et al.: "Virtualized Reality: Constructing Virtual Worlds From Real Scenes" IEEE Multimedia, Jan – Mar 1997, IEEE, USA, Vol. 4, No. 1, pages 34 – 47.	
DC		Narayanan, PJ et al.: "Constructing Virtual Worlds Using Dense Stereo" 6th International Conference On Computer Vision. ICCV '98. Bombay, Jan. 4-7, 1998, pages 3-10.	*
0		Tsai R Y: "A Versatile Camera Calibration Technique For High-Accuracy 3D Machine Vision Metrology Using Off-The-Shelf TV Cameras and Lenses," IEEE Journal of Robotics and Automation, IEEE Inc. New York, US, vol. RA-3, no. 4, August 1987 (1987-08); pages 323-344.	
۷C		Vedula S et al.: "Modeling, combining and rendering dynamic real-world events from image sequences," VSMM98. 4 <sup>th</sup> International Conference On Virtual Systems and Multimedia, 1998 pp. 326-332.	
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valid OMB control number Complete if Known Substitute for form 1449A/PTO **Application Number** 10/074,315 Filing Date Feb. 12, 2002 INFORMATION DISCLOSURE First Named Inventor Kanade STATEMENT BY APPLICANT Art Unit 2872 Examiner Name (use as many sheets as necessary) Attomey Docket Number 010130 Sheet

		U.	S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No.1	Document Number Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
ns		5,164,827	11/17/92	Paff	
10		6,005,610	12/21/99	Pingali	
AL		6,094,198	07/25/00	Shashua	
04		5,912,700	06/15/99	Honey et al.	
1C		6,608,923	08/19/03	Zhang et al.	
NC		5,489,886	02/06/96	Wexler et al.	
Ŋζ		5,714,997	02/03/98	Anderson	
nc		6,100,925	08/08/00	Rosser et al.	
DC	1	6,157,747	12/05/00	Szeliski et al.	
0(		6,259,853	07/10/01	Chen et al.	
PL		2001/0028399	10/11/01	Conley	:
0(_		2001/0052131	12/13/01	Hobson et al.	
ÖC		2002/0030741	03/14/02	Broemmelsiek	,
00		2003/0076413	04/24/03	Kanade et al.	
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Sheet 1

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known				
Application Number	10/074,315			
Filing Date	Feb. 12, 2002			
First Named Inventor	Kanade			
Art Unit	2872	***************************************		
Examiner Name	TBD			
Attorney Docket Number	010130			

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